APPLICATIONS			REVISIONS			
NEXT ASSEMBLY	1st USED ON	REV	DESCRIPTION		DATE	APPROVED
	MKIIA	A	Design Baseline Release		01/11/30	M.Shramko
		B	Revised Per CN 31716	wbc-s	03/02/21	P.Viens
		C	Revised Per CN 32147	wbc-s	03/06/04	

UNDER DOCUMENTATION CONTROL

COLOR INSERT

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CONTRACT NO	DWN.. M. Shramko	01/08/28	Sippican, Inc.			
	CHK. N. Cutler	01/12/03	MARION, MASSACHUSETTS 02738			
	P.E.					
DO NOT SCALE DRAWING	DES. ENG.M.Shramko	01/08/28	MARK IIA RADIOSONDE FLIGHT PREPARATION INSTRUCTIONS			
	P.C. M.Corman	01/09/04				
	Q.C. J.Marushack	01/09/04				
INTERPRET IN ACCORDANCE WITH DOD-STD-100	C.M.					
	REL.					
	MFG. A.Sequeria	01/09/10	CAGE CODE	SIZE	DRAWING NUMBER	REV
	ENG. MGR. P.Viens	01/09/04	16848	A	01-154995	C
	OTHER					
	OTHER		SCALE: None		SHEET 1 OF 6	

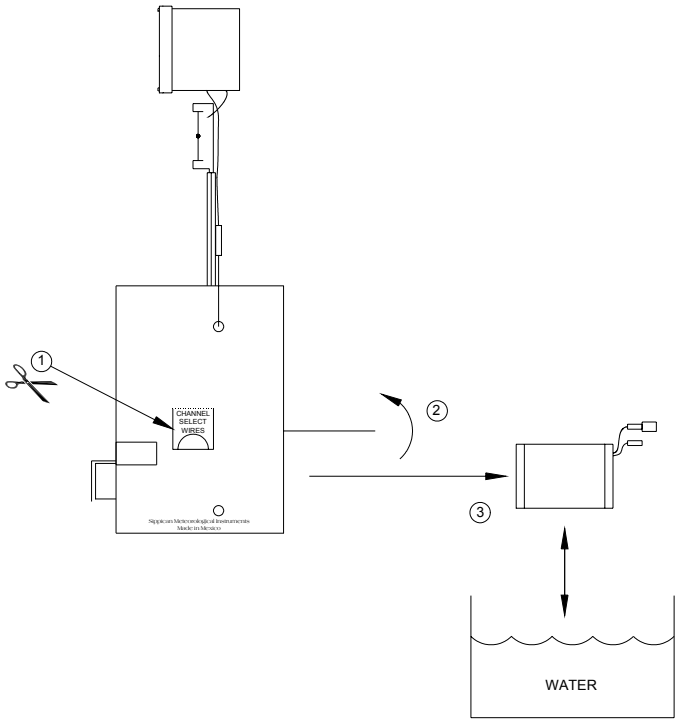

Figure 1 - Steps 1 through 3

1. Select transmitter frequency
   a. The default transmitter frequency is 1676 MHz.
   b. If desired, the frequency can be changed by cutting the thin black and white channel wires (be careful not to cut the battery leads) and tucking the cut leads back under the sleeve.
   c. To expose the channel select wires open the 'CHANNEL SELECT WIRE' flap on the side of the Radiosonde.
   d. The table below outlines what frequencies can be achieved by cutting the wires:

Table 1 - Frequency Selection Chart

Channel Select Wires		**Frequencies**			
White	**Black**	1676	1678	1680	1682
Un-Cut	Un-Cut	✓			
Un-Cut	Cut		✓		
Cut	Un-Cut			✓	
Cut	Cut				✓

2. Open Battery Compartment.
   a. The battery compartment panel has two single perforations that will need to be broken to open the BATTERY panel.
   b. Pull on the finger cut-out below the text that reads 'BATTERY'

3. Activate the battery
   a. With the battery positioned such that the label faces upward (Top-Up position) immerse it in fresh tap water to a minimum depth of 1” below the surface of the water.
   b. Do not allow the battery connectors to become wet.
   c. Leave the battery in the water for 2 minutes.
   d. Remove the battery from the water and hold the battery with the label facing downward (Top-Down position).
   e. Remove excess water by extending arm and swinging the battery in an arc beginning over the head and stopping abruptly at the knees.
   f. Repeat this motion 10 times.

Note: It is important that the surface containing the battery label be facing downward (Top-Down position) during the shaking period.

   g. Examine the partially waxed sides of the battery for any remaining excess water in the unwaxed areas.
   h. Repeat steps 3e and 3f if excess water is found.

Note: Excess water causes overheating and a shorter life.

   i. Insert the battery into a plastic bag (supplied in radiosonde shipping carton).

4. Condition the Battery
   a. Grasp the connectors coming from the radiosonde and twist them clockwise 4 turns to put some twists in the wires between the radiosonde and the connectors. Do the same for the battery connector, twisting in the opposite direction.
   b. Place the battery into the radiosonde battery compartment positioned with **TOP** label facing **OUT** of the compartment.
   c. Connect the ground lead of the radiosonde to the ground lead of the battery. Then connect the positive lead of the battery to the positive lead of the radiosonde battery connector. .

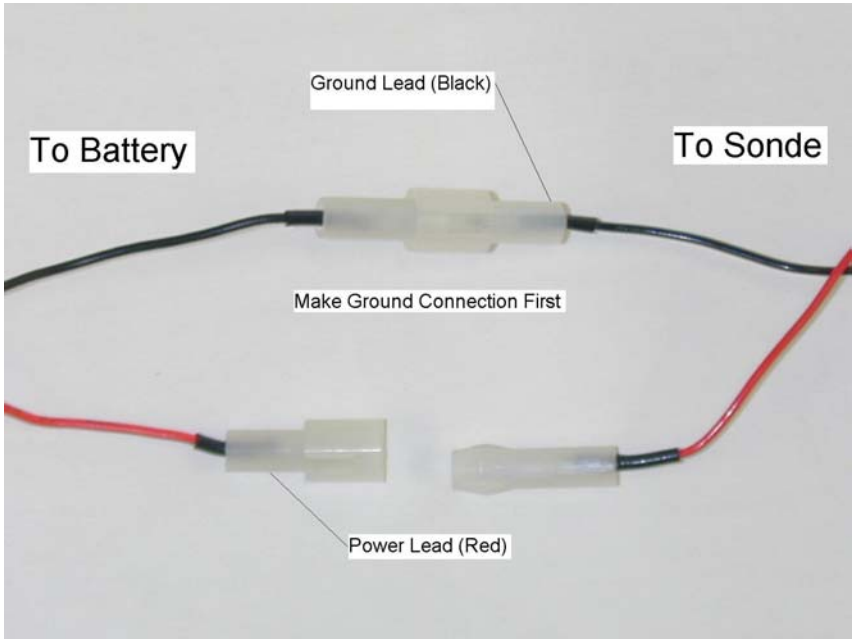

Figure 2 - Connection of the battery

Note: The radiosonde will not activate until the battery has reached approximately 5.6 VDC. The battery will gradually charge after connection to the radiosonde. The radiosonde activation may take two or three minutes after initial battery connection.

Note: If you push the battery all the way into the bag, and tuck the bag ends in, the battery fits easier.

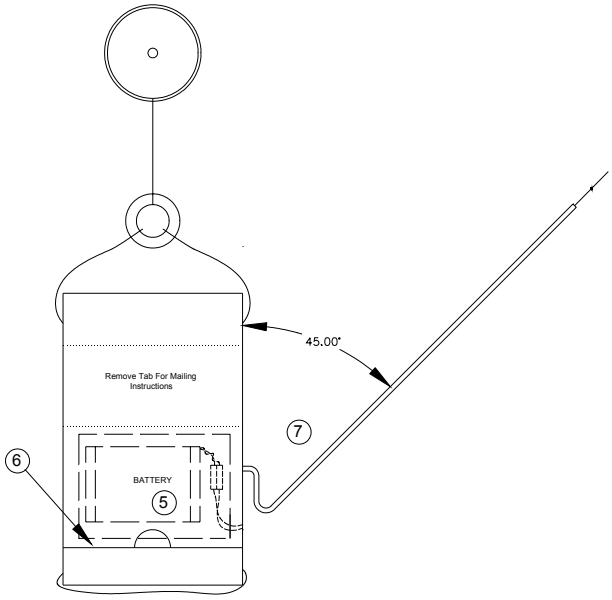

Figure 3 - Steps 5 through 7

5. Tuck excess wire and the battery connectors into the battery compartment.
6. Close the battery panel.
   a. Use the tape strips provided on the inside of the flap to tape the battery flap closed. Peel the tape backing away.
   b. Close the panel and run your finger along to bottom edge to seal
7. Deploy the thermistor arm
   a. Orient the arm as shown in Figure 3.

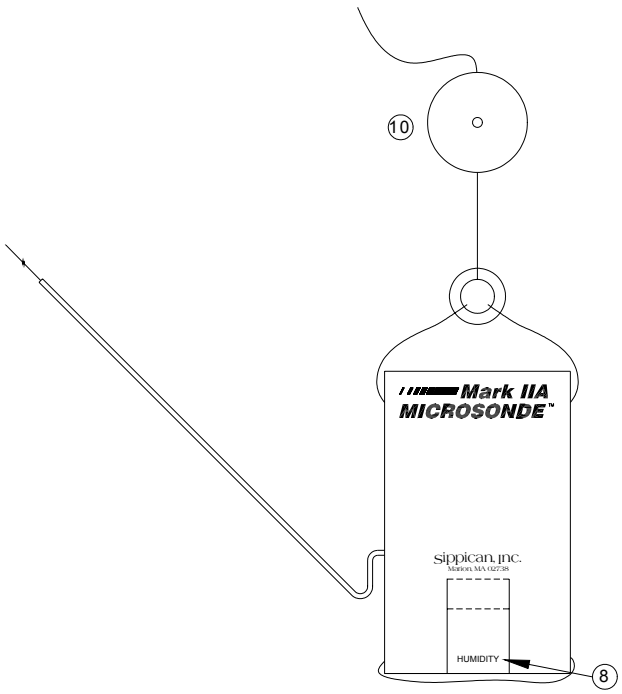

Figure 4 - MkIIA Radiosonde Ready for Flight

8. Deploy the hygristor
   a. Remove the hygristor can cover.
   b. Using tape not supplied by Sippican, tape the hygristor flap shut.

9. Place the radiosonde in an area with a clear view of the sky in order to be able to receive the signals from the GPS satellites. Alternatively, the radiosonde can be placed under a GPS repeater, if one is available. The radiosonde should attain GPS lock up in about 200 seconds.

10. Attach the radiosonde to the balloon and launch.
    a. Remove tape from dereeler.
    b. Dereel a foot of string to ensure that dereeler is functioning smoothly.
    c. Tie the dereeler string to the radiosonde lifting device train assembly.
    d. Attach the loop of string from the dereeler to the plastic ring of the radiosonde.